

ABSTRACT OF THE DISCLOSURE

5 An optical fiber comprises a core region, an inner  
cladding region, and an outer cladding region. Each of the  
core region and inner cladding region is doped with  $\text{GeO}_2$ ,  
whereas the inner cladding region is also doped with Fe element.  
The core region has a refractive index higher than each of  
the refractive index of the inner cladding region and the  
refractive index of the outer cladding region. Each of the  
core region and inner cladding region doped with  $\text{GeO}_2$  has  
10 a UV photosensitivity. The deviation in concentration  
distribution of  $\text{GeO}_2$  added to the inner cladding region is  
so small that the deviation in UV photosensitivity in the  
inner cladding region is  $\pm 10\%$  or less.